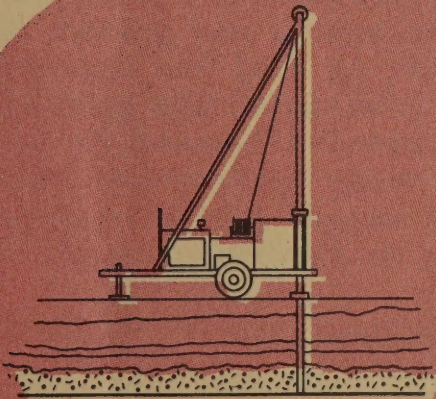
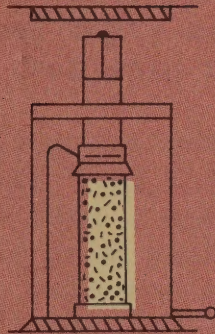
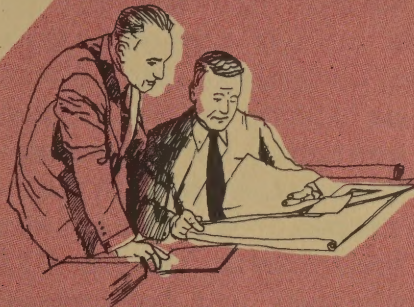


STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION

RAYMOND T. SCHULER, COMMISSIONER



SOIL MECHANICS  
BUREAU



TEST WELL REPORT  
ARIETTA MAINTENANCE  
PATROL SITE  
CONTRACT LD 75-18  
HAMILTON COUNTY  
PIN 2800.37.301

APRIL, 1976



## MEMORANDUM

## DEPARTMENT OF TRANSPORTATION

DATE April 1, 1976

SUBJECT TEST WELL CONSTRUCTION REPORT  
ARIETTA MAINTENANCE PATROL SITE  
PIN 2800.37-301 HAMILTON COUNTY

FROM A. Yatsevitch, Senior Engineering Geologist *A. Yatsevitch*

TO E. M. Moody, Associate Soils Engineer ✓

On January 26, 1976 this writer met at the site of the subject project with Mr. E. Blessing (E.I.C.) to stake out the well location prior to the anticipated arrival of the contractor that same afternoon. Due to bad weather delays the contractor was not able to reach the site and get set up to start drilling until January 28, 1976. Delays pertaining to contractor's insurance certificates allowed work to start on January 29, 1976 at which time a roller bit was used to progress a 6" diameter hole through the overburden to rock at approximately 42'. A large boulder and cobbles at approximately 20' required the use of a 15" diameter bit to place the 12" casing prescribed for grouting. Delays due to bad weather postponed the installation of the 12" pipe to the required depth and the seating of the 6" casing approximately 1.5 feet into rock until February 2, 1976.

On ~~January~~ <sup>FEBRUARY</sup> 2 drilling was resumed and only small quantities of water, totaling less than 1.5 GPM. were encountered, until at a total depth of 199 feet a seam approximately 2.5 feet thick in the otherwise sound rock yielded slightly over 15 G.P.M. The broken zone of the seam was thoroughly cleaned out by multiple passes of the drill bit and an additional ten feet was drilled for storage and catchment of particulates below the water producing zone. On February 11 grouting was completed. The 12" outer casing was lodged in the boulders and cobbles of the overburden and was left in place by the contractor for fear of dislodging the relatively short length (43 ft.+) of 6" casing in the withdrawal process. The upper 6 feet of annular space between the casings above the grout was filled with sand to facilitate making connections to the well at a later date. The drilling rig departed on this date.

On February 17 the pumping crew arrived, disinfected the well and conducted the 12 hour pumping test. On the following morning (another blizzard) this writer met at the project site with Mr. Blessing and received the water samples taken at the conclusion of the pump test and delivered them to the D.O.H. laboratories for analyses. The results of the analyses are attached as well as a

NYSDOT

Library

50 Wolf Road, POD 34

Albany, New York 12232



E. M. Moody  
April 1, 1976  
Page Two

well log made up by this writer from the well samples and a tabulation of the pumping test. Provisions have been made by Mr. Blessing to have a plate cap welded on the well casing to provide a tamper-proof seal.

AY:MVM *ju4*  
Attachment



NEW YORK STATE DEPARTMENT OF HEALTH  
DIVISION OF LABORATORIES AND RESEARCH  
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION

(PAGE 1 OF 2)

LAB ACCESSION NO: 00908 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/11

REPORTING LAB: 10 GRIFFIN LAB  
PROGRAM: 820 NYS DEPT. OF TRANSP.  
STATION (SOURCE) NO:  
DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON  
COORDINATES: DEG 1 "N, DEG 1 "W  
COMMON NAME INCL SUBWISHED: ARIETTA

EXACT SAMPLING POINT: MAINT PATROL SITE 6075 18  
TYPE OF SAMPLE: 12 WATER, DRILLED WELL  
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/01  
REPORT SENT TO: CO (1) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

PARAMETER	UNIT	RESULT	NOTATION
000100 COLOR (APPARENT)		0.	
000200 TURBIDITY J.T.U.		0.13	
000300 ODOR, HOT		1. VEGET	
000501 NITROGEN, AMMONIA	MG/L	0.0960	+/- 6%
000709 NITROGEN, NITRITE	MCG/L	1.87	LT
000801 NITROGEN, NITRATE	MG/L	0.294	+/- 15%
001001 CHLORIDE	MG/L	2.57	+/- 31%
001101 HARDNESS, TOTAL AS CaCO3	MG/L	45.	
001501 ALKALINITY, M'ORANGE,	MG/L	48.	
001900 PH (LABORATORY)		8.1	
006501 C.O.D.	MG/L	4.	
000001 IRON	MG/L	0.05	LT
010201 MANGANESE	MG/L	0.02	LT

DATE COMPLETED: 3/22/76

DEPUTY CHIEF ENGINEER, TECHNICAL SERVICES  
NYS DEPT. OF TRANSPORTATION, BLDG. 7A  
1220 WASHINGTON AVENUE  
ALBANY, N.Y. 12226

SUBMITTED BY: WP HOFMAN



NEW YORK STATE DEPARTMENT OF HEALTH  
DIVISION OF LABORATORIES AND RESEARCH  
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION

(PAGE 2 OF 2)

LAB ACCESSION NO: 00908 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/11

REPORTING LAB: 10 GRIFFIN LAB

PROGRAM: 820 NYS DEPT. OF TRANSP.

STATION (SOURCE) NO:

DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON

COORDINATES: DEG ' "N, DEG ' "W

COMMON NAME INCL SUBMITTED: ARIETTA

EXACT SAMPLING POINT: MAINT PATROL SITE 6075 18

TYPE OF SAMPLE: 12 WATER, DRILLED WELL

MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/01

REPORT SENT TO: CO (1) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

PARAMETER	UNIT	RESULT	NOTATION
010701 SODIUM	MG/L	4.6	
100300 ODOR, COLD		1, VEGET	

DATE COMPLETED: 3/22/76

DEPUTY CHIEF ENGINEER, TECHNICAL SERVICES  
NYS DEPT. OF TRANSPORTATION, BLDG. 7A  
1220 WASHINGTON AVENUE  
ALBANY, N.Y. 12226

SUBMITTED BY: WP HOFMAN



NEW YORK STATE DEPARTMENT OF HEALTH  
DIVISION OF LABORATORIES AND RESEARCH  
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION

(PAGE 1 OF 1)

LAB ACCESSION NO: 00861 YR/MO/DAY/HR SAMPLE REC'D: 76/02/18/14

REPORTING LAB: 01 CENTRAL AVE. LAB

PROGRAM: 820 NYS DEPT. OF TRANSP.

STATION (SOURCE) NO:

DRAINAGE BASIN: NY GAZETTEER NO: 2050 COUNTY: HAMILTON

COORDINATES: DEG ' "N, DEG ' "W

COMMON NAME INCL SUBMITTED: MAINT PATROL SITE LD75 1B T. ARIETTA

EXACT SAMPLING POINT: DIRECT FROM WELL

TYPE OF SAMPLE: 16 PRIVATE SUPPLY, MISCELL.

MO/DAY/HR OF SAMPLING: FROM 00/00 TO 02/18/13

REPORT SENT TO: CO (2) RO (0) LPHE (0) LHO (0) FED (0) CHEM (0)

PARAMETER	UNIT	RESULT	NOTATION
026800 STD. PLATE COUNT 48 HR 7ML		1:	LT
027000 COLIF. MP COL/100ML		1:	LT

DATE COMPLETED: 3/18/76

DEPUTY CHIEF ENGINEER, TECHNICAL SERVICES  
NYS DEPT. OF TRANSPORTATION, BLDG. 7A  
1220 WASHINGTON AVENUE  
ALBANY, N.Y. 12226

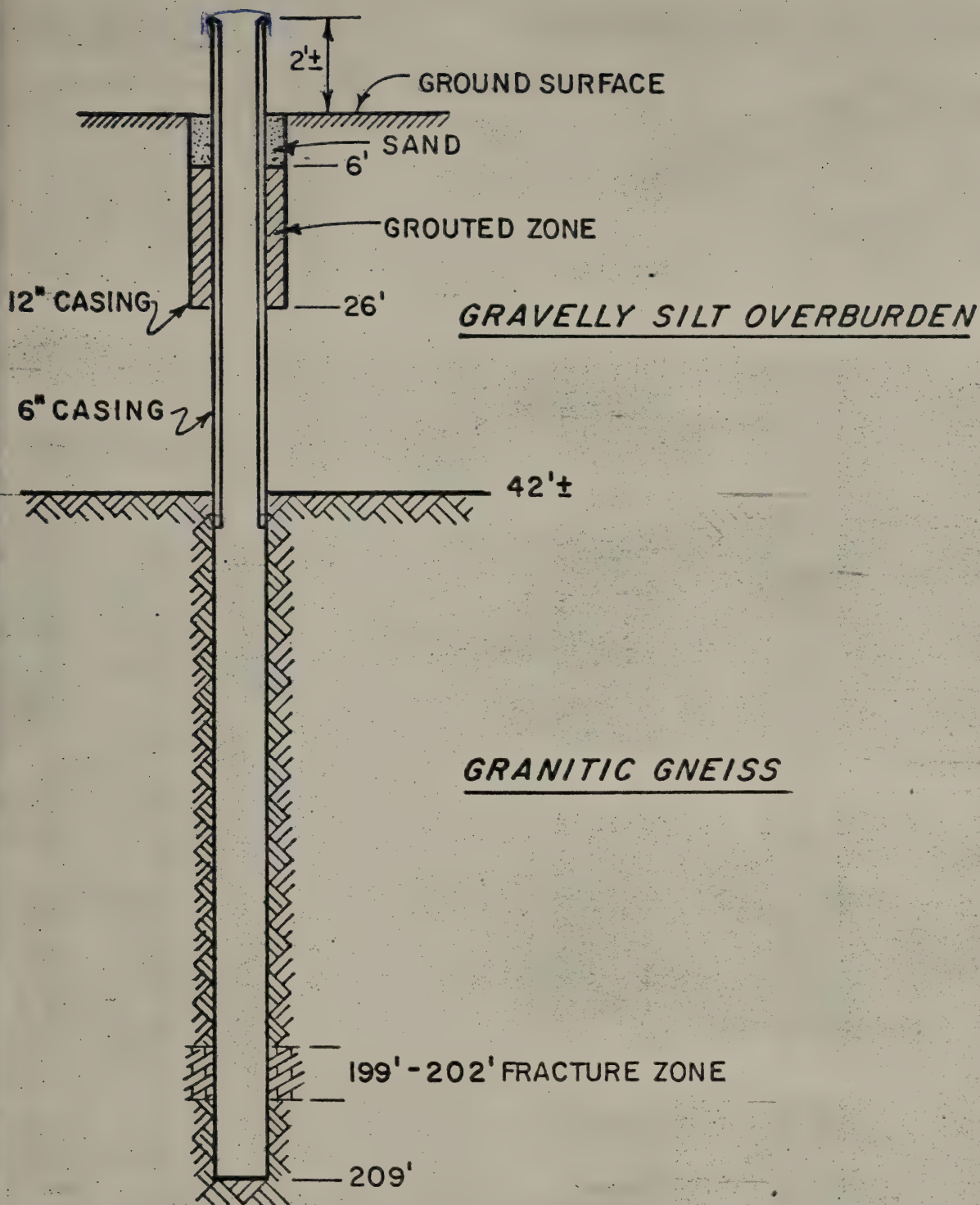
SUBMITTED BY: HOEMANN



WELL LOG

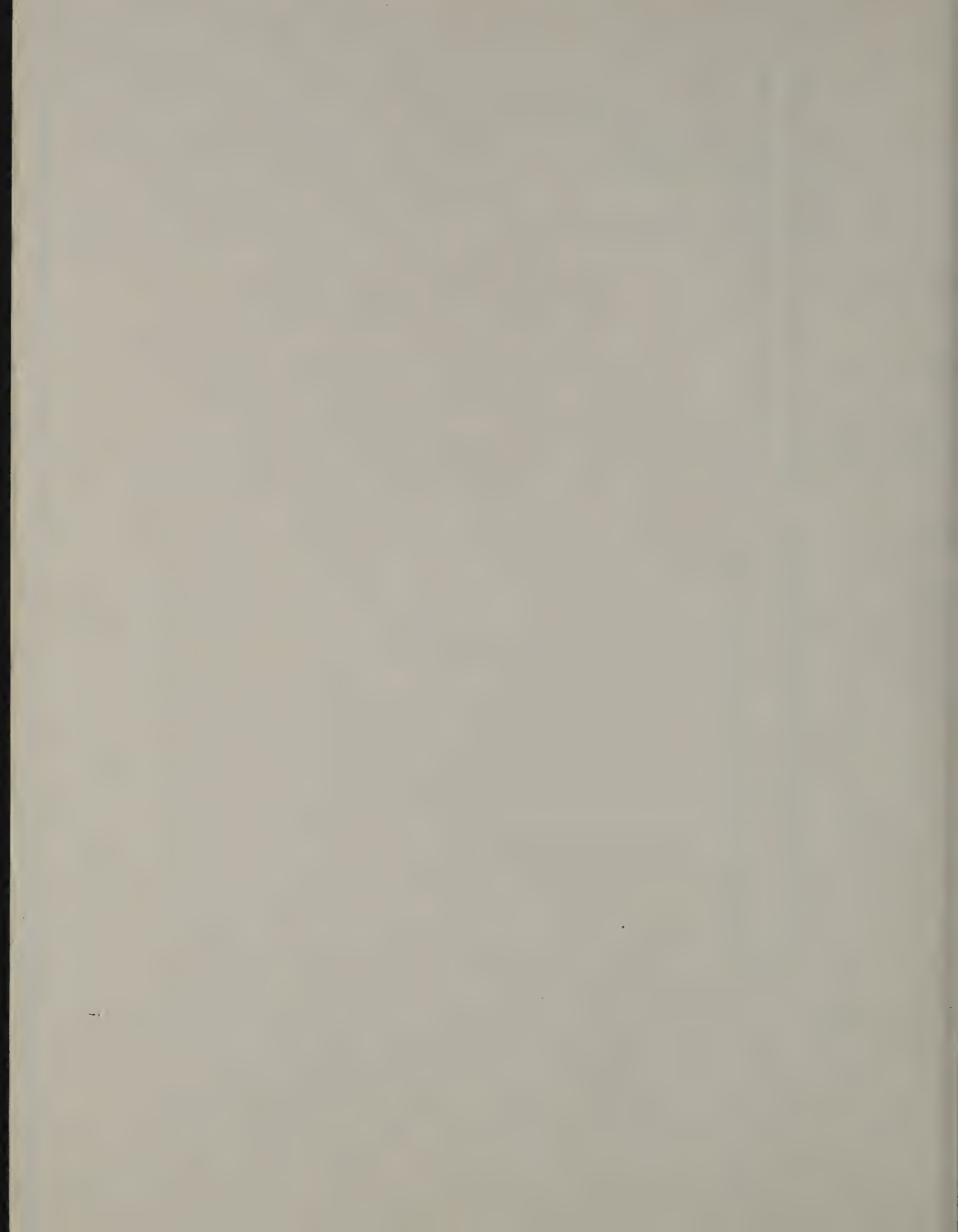
0-10'	Coarse sandy gravel, some silt. Med. yellowish tan. Weathered granitic chips.
10-20'	Fine sandy silt. Some gravel. Med. yellowish tan. Weathered granitic chips.
20-30'	Med. sandy silt. Some gravel. Med. yellowish tan. Weathered granitic chips.
30-40'	Med. sandy silt. Trace gravel. Med. yellowish tan. Weathered granitic chips.
40-50'	Quartzitic, leukogranitic garnetiferous gneiss. Rock at 42'±.
55'	Garnetiferous biotite granitic gneiss.
60'	" " " "
65'	Garnetiferous mafic granitic gneiss.
70'	Garnetiferous quartz-biotite granitic gneiss.
75'	Garnetiferous biotite granitic gneiss.
80'	" " " "
85'	" " " "
90'	" " " "
95'	Garnetiferous quartz biotite granitic gneiss. Predominantly salmon feldspar.
100'	Garnetiferous quartz biotite granitic gneiss. Some salmon feldspar.
105'	Garnetiferous biotite granitic gneiss. Some salmon feldspar.
110'	" " " " " " "
115'	Garnetiferous biotite granitic gneiss. Trace salmon feldspar.
120'	" " " " " " "
125'	" " " " " " ----
130'	" " " " " " ----
135'	Garnetiferous biotite granitic gneiss. Some salmon feldspar.
140'	" " " " " " "
145'	" " " " " " "
150'	" " " " " " . Much salmon feldspar.
155'	" " " " " " . Some salmon feldspar.
160'	" " " " " " . Some beige feldspar.
165'	" " " " " " . ----
170'	" " " " " " . ----
175'	Garnetiferous biotite granite gneiss.
180'	" " " " " " "
185'	" " " " " " . Some oxidation.
190'	" " " " " " . ---
195'	" " " " " " . Some oxidation.
200'	Garnetiferous biotite granite gneiss. Some salmon feldspar. Extensive oxidation.
209'	" " " " " " " " "
	Extensive oxidation.





WELL PROFILE

P.I.N. 2800.37.301  
PATROL HEADQUARTERS SITE  
ARIETTA, HAMILTON COUNTY  
TEST WELL No. 1



Poyntelle, Pa. 18454

Sheet No. 17 of       

Date February 17, 1976

ENGINEER  
OF  
ARCHITECT

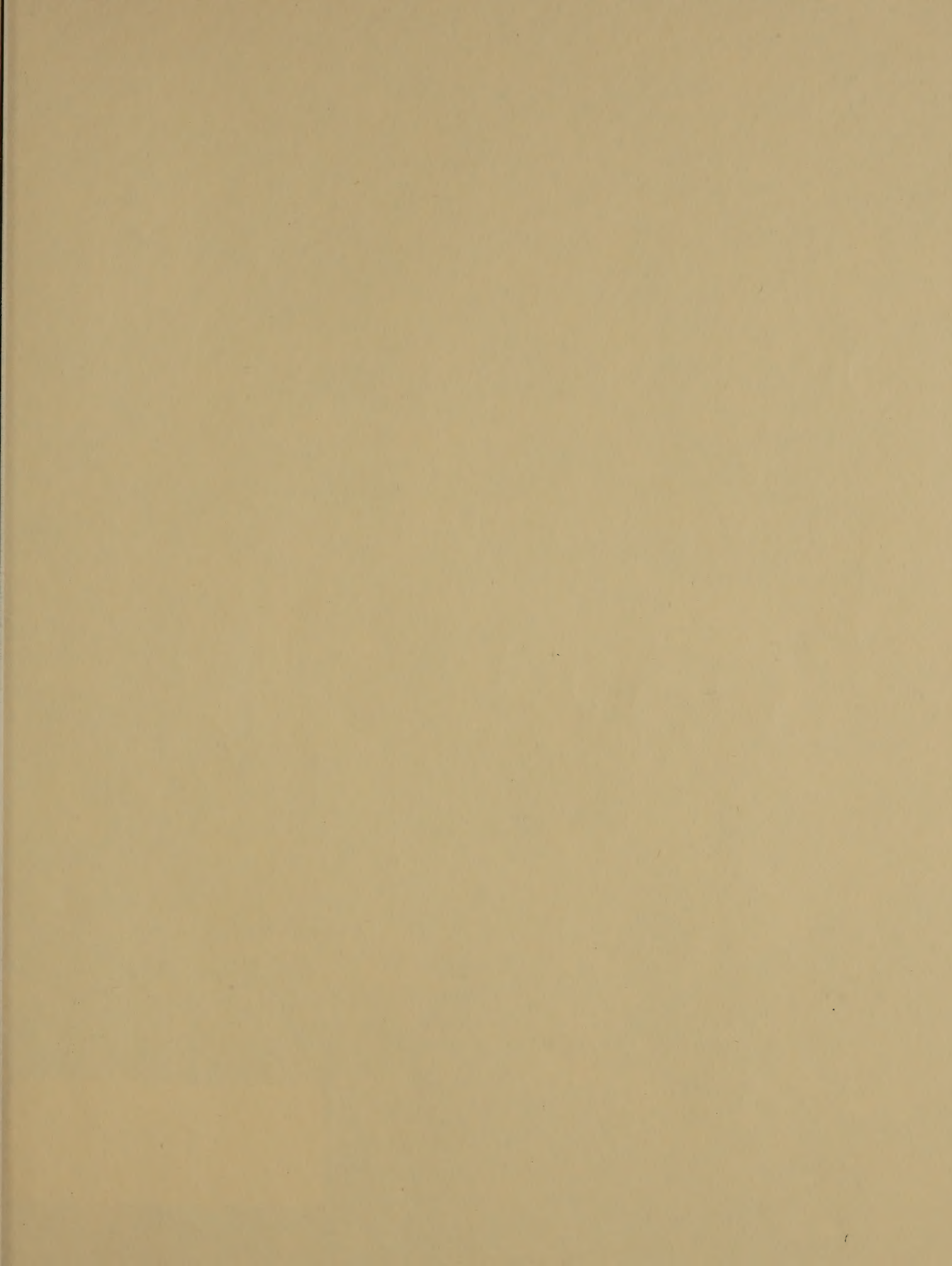
ELL NO. 1 LOCATION: Arietta, New York

### BEST RESULTS:

[illegible]

• NOTE WHETHER WATER IS CLEAR OR TURBID





**00987**



LRI